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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/714,133 | 11/14/2003 | Tsuyoshi Ohyama | 09792909-5730 | 3928 |

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SONNENSCHEIN NATH & ROSENTHAL LLP
P.O. BOX 061080
WACKER DRIVE STATION, SEARS TOWER
CHICAGO, IL 60606-1080

| EXAMINER | |
|---|---|
| SCHECHTER, ANDREW M | |
| ART UNIT | PAPER NUMBER |
| 2871 | |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/714,133 | OHYAMA ET AL. | |
| | Examiner | Art Unit | |
| | Andrew Schechter | 2871 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *16 August 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *8-10,18-20 and 23-45* is/are pending in the application.

4a) Of the above claim(s) *8-10 and 23-45* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *18-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 February 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Request for Continued Examination*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 16 August 2007 has been entered.

### *Response to Arguments*

2. Applicant's arguments filed 16 August 2007 have been fully considered but they are not persuasive.

The applicants argue that *Roosendaal* has been removed as a prior art reference by the submission of the affidavit under 37 CFR 1.131 on 16 August 2007. This is not persuasive. The examiner agrees that the affidavit evidences conception of the invention at least as early as 26 February 2002, in the JP '364 application. However, it is also necessary to show diligence from prior to the effective date of the reference (26 August 2002) to a subsequent reduction to practice or to the filing of the application. This has not been done. On page 3 of the affidavit, the applicants merely assert that there was "reasonable diligence from conception to reduction to practice". First, the examiner notes that this period (26 February 2002 to 14 November 2003) is actually not

the relevant period; the relevant period is the shorter period from 26 August 2002 to 14 November 2003. Second, the applicant has not provided evidence to account for this entire period, either by affirmative acts or acceptable excuses on the part of the applicants or applicants' representatives, as is necessary [see MPEP 2138.06]. Third, the examiner notes that the previous application JP '163 was filed in Japan and subsequently abandoned prior to the filing of the JP '364 application. Exactly when was this previous application abandoned? The examiner notes that it is possible this date may be material to the question of diligence, in providing a framework for understanding the applicants' actions during the relevant period.

*Roosendaal* therefore remains a proper reference and the previous rejections are repeated below.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Roosendaal et al.,* U.S. Patent No. 6,731,360.

*Roosendaal* discloses [see Fig. 1, for instance] a method of manufacturing a liquid crystal display which has a pair of substrates [inherent] and a liquid crystal layer [12] interposed between the substrates and which has a reflective area [on left] and a

transmissive area [on right], the method comprising the steps of forming a retardation film [16a] on at least one of the substrates, and patterning the retardation film such that the retardation film remains at least in the reflective area and the phase difference of the retardation film differs between the reflective area and the transmissive area [col. 5, lines 22-26, etc.]. *Roosendaal* does not (perhaps) explicitly disclose that an alignment film is formed on at least one of the substrates and the retardation film is formed on the alignment film.

However, *Roosendaal* does disclose manufacturing the patterned quarterwave foil by photo-polymerization of a reactive liquid crystal material, and states that "[these] materials get their orientation from thin polymer alignment films; similar to those used to orientate a liquid crystal layer" [col. 6, lines 4-8]. It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to form an alignment layer between the substrate and the retardation film in *Roosendaal*, motivated by *Roosendaal's* teaching that this is the means by which the retardation film gets its orientation. Claim 18 is therefore unpatentable.

The retardation film is composed of a liquid crystal polymer [col. 6, lines 4-8], so claim 19 is also unpatentable.

5. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Roosendaal et al.,* U.S. Patent No. 6,731,360 in view of *Kubota et al.,* U.S. Patent No. 6,771,334 and *Kitagawa et al.,* U.S. Patent No. 6,404,469.

*Roosendaal* does not disclose that the liquid crystal polymer is obtained by curing an ultraviolet-curable liquid crystal monomer in a nematic phase. *Kubota*

discloses an analogous device and teaches that the retardation film with differing regions can be obtained by curing a "UV crosslinking liquid crystal polymer" [col. 10, lines 34-40]. *Kubota* is silent on the nematic phase limitation; *Kitagawa* discloses such a compensator in a nematic phase [col. 3, lines 6-17]. It would have been obvious to one of ordinary skill in the art at the time of the invention to make the retardation layer a liquid crystal polymer of such a composition (UV curable material) in a nematic phase, motivated by *Kitagawa's* teaching that the production process for such sheets is known and they are commercially available (reducing uncertainties and experimentation in manufacturing), and *Kubota's* and *Kitagawa's* teaching that they allow control of optical characteristics including retardation. Claim 20 is therefore unpatentable.

***Election/Restrictions***

6. Claims 8-10 and 23-45 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made without traverse in the reply filed on 4 August 2005.

***Conclusion***

7. All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued

examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Schechter whose telephone number is (571) 272-2302. The examiner can normally be reached on Monday - Friday, 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on (571) 272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Andrew Schechter
Primary Examiner
Technology Center 2800
2 September 2007